



P.B.5818 – Patentlaan 2  
2280 HV Rijswijk (ZH)  
+31 70 340 2040  
TX 31651 epo nl  
FAX +31 70 340 3016

Europäisches  
Patentamt

Zweigstelle  
in Den Haag  
Recherchen-  
abteilung

European  
Patent Office

Branch at  
The Hague  
Search  
division

Office européen  
des brevets

Département à  
La Haye  
Division de la  
recherche

Mertens, Hans Victor  
Exter Polak & Charlouis B.V., P.O. Box 3241  
2280 GE Rijswijk  
PAYS-BAS

Termijn:

Rec.: 08 MAART 2004

Datum/Date

09.03.04

Opbergen:

Zeichen/Ref./Réf. P27012EP00/ME	Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n°. 03078911.9-1237-
------------------------------------	--

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire  
Samsung Electronics Co., Ltd.

## COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

abstract  title

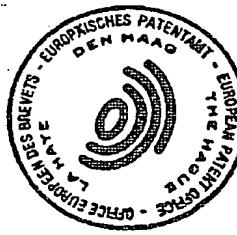
The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract:

6

## REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	JIANG YUE ET AL: "Performance of a space-time block coded ofdm system" CONFERENCE RECORD OF THE 36TH. ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS, & COMPUTERS. PACIFIC GROOVE, CA, NOV. 3 - 6, 2002, ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS AND COMPUTERS, NEW YORK, NY: IEEE, US, vol. 1 OF 2. CONF. 36, 3 November 2002 (2002-11-03), pages 1862-1866, XP010638515 ISBN: 0-7803-7576-9 * page 1863, left-hand column, line 8 - right-hand column, line 4 * * page 1863, right-hand column, line 20 - page 1864, left-hand column, line 20 * ---	13-20	H04L1/06 H04L25/02
A		1,8	
A	VALENTI M C ET AL: "A bandwidth efficient pilot symbol technique for coherent detection of turbo codes over fading channels" MILITARY COMMUNICATIONS CONFERENCE PROCEEDINGS, 1999. MILCOM 1999. IEEE ATLANTIC CITY, NJ, USA 31 OCT.-3 NOV. 1999, PISCATAWAY, NJ, USA, IEEE, US, 31 October 1999 (1999-10-31), pages 81-85, XP010369653 ISBN: 0-7803-5538-5 * page 82, left-hand column, line 6 - line 16 * * page 82, left-hand column, line 26 - line 40 * * page 83, left-hand column, line 14 - line 30; figures 1,4 * ---	1,8,13, 17	TECHNICAL FIELDS SEARCHED (Int.Cl.7) H04L
The present search report has been drawn up for all claims			
1	Place of search THE HAGUE	Date of completion of the search 26 February 2004	Examiner Papantoniou, A
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	<p>EP 1 229 669 A (FUJITSU LTD) 7 August 2002 (2002-08-07)</p> <p>* page 10, paragraph 76 *</p> <p>* page 10, paragraph 82 – page 11, paragraph 86 *</p> <p>* page 11, paragraph 91 *</p> <p>* page 12, paragraph 97 *</p> <p>* page 13, paragraph 103 *</p> <p>* page 14, paragraph 109 – page 15, paragraph 114; figures 4,6,7,10 *</p> <p>* page 12, paragraphs 97,98 *</p> <p>---</p>	1,8,13, 17	
A	<p>WO 02 103926 A (QUALCOMM INC) 27 December 2002 (2002-12-27)</p> <p>* page 27, paragraph 1094 – page 28, paragraph 1096; figures 3,4B,5 *</p> <p>* page 39, paragraph 1135 – paragraph 1136 *</p> <p>* page 44, paragraph 1156 – page 45, paragraph 1159 *</p> <p>---</p>	1,8,13, 17	
A	<p>EP 1 185 001 A (NORTEL NETWORKS LTD) 6 March 2002 (2002-03-06)</p> <p>* page 3, paragraphs 14,18 *</p> <p>* page 6, paragraph 57 – paragraph 60 *</p> <p>* figures 5,7 *</p> <p>---</p>	1,8,13, 17	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
<p>The present search report has been drawn up for all claims</p>			
1	Place of search	Date of completion of the search	Examiner
	THE HAGUE	26 February 2004	Papantoniou, A
CATEGORY OF CITED DOCUMENTS		<p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... &amp; : member of the same patent family, corresponding document</p>	
<p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p>			

ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

EP 03 07 8911

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

26-02-2004

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 1229669	A	07-08-2002	GB	2371947 A	07-08-2002
			EP	1229669 A1	07-08-2002
			JP	2002314483 A	25-10-2002
			US	2002150065 A1	17-10-2002
WO 02103926	A	27-12-2002	US	2003112880 A1	19-06-2003
			WO	02103926 A1	27-12-2002
EP 1185001	A	06-03-2002	US	2002122383 A1	05-09-2002
			CA	2351140 A1	01-03-2002
			CA	2355433 A1	01-03-2002
			EP	1185001 A2	06-03-2002
			EP	1185048 A2	06-03-2002
			US	2002122381 A1	05-09-2002
			US	2002122382 A1	05-09-2002
			US	2002041635 A1	11-04-2002